

**PUBLIC UTILITIES COMMISSION**

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



November 2, 2004

Agenda ID #4017

TO: PARTIES OF RECORD IN RULEMAKING 95-04-043 AND  
INVESTIGATION 95-04-044

This is the draft decision of Administrative Law Judge (ALJ) Thomas R. Pulsifer. It will not appear on the Commission's agenda for at least 30 days after the date it is mailed. The Commission may act then, or it may postpone action until later.

When the Commission acts on the draft decision, it may adopt all or part of it as written, amend or modify it, or set it aside and prepare its own decision. Only when the Commission acts does the decision become binding on the parties.

Parties to the proceeding may file comments on the draft decision as provided in Article 19 of the Commission's "Rules of Practice and Procedure." These rules are accessible on the Commission's website at <http://www.cpuc.ca.gov>. Pursuant to Rule 77.3 opening comments shall not exceed 15 pages. Finally, comments must be served separately on the ALJ and the assigned Commissioner, and for that purpose I suggest hand delivery, overnight mail, or other expeditious method of service.

/s/ ANGELA K. MINKIN

Angela K. Minkin, Chief  
Administrative Law Judge

ANG:eap

Attachment

183263

Decision **DRAFT DECISION OF ALJ PULSIFER** (Mailed 11/2/2004)

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking on the  
Commission's Own Motion into Competition  
for Local Exchange Service.

Rulemaking 95-04-043  
(Filed April 26, 1995)

Order Instituting Investigation on the  
Commission's Own Motion into Competition for  
Local Exchange Service.

Investigation 95-04-044  
(Filed April 26, 1995)

**OPINION ADOPTING RULES FOR  
CARRIER INVENTORY OF NUMBERING RESOURCES**

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## ORDER ADOPTING RULES FOR CARRIER INVENTORY OF NUMBERING RESOURCES

### I. Introduction

By this order, we adopt rules for determining the inventory of numbering resources applicable to telecommunications carriers that hold codes or thousand-number blocks within rate centers in California. Our purpose in adopting in these rules is to promote more efficient numbering resource utilization, and thereby to extend the life of California's area codes. These rules will provide carriers a clear and objective method to assess their inventory needs. Adoption of these rules will assure that carriers return or donate surplus thousand-blocks to the applicable number pool, thereby decreasing surplus phone number inventories and avoiding premature exhaust of area codes.

Pub. Util. Code § 7943(c) requires that "the Commission shall first ...implement all reasonable telephone number conservation measures" before approving an area code split. Our adoption of inventory rules, as adopted herein, based upon how carriers actually utilize numbers is an essential measure to support the most efficient use of telephone numbers in an area code. Inventory rules that reflect carriers' actual need for numbers and constitutes one of the "reasonable telephone number conservation measures" required in accordance with § 7943(c).

Federal Communications Commission (FCC) Order 00-104<sup>1</sup> adopted various rules relating to the utilization of numbering resources. Among these rules, the FCC authorized each carrier to maintain no more than a six-month

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<sup>1</sup> *Numbering Resource Optimization*, CC Docket No. 99-200, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 00-104 (released March 31, 2000).

inventory of numbers. The FCC stated that “a six-month inventory is appropriate and sufficient to assure adequate access to numbering resources,” and to reduce the potential waste of unused telephone numbers.<sup>2</sup>

The FCC requires pooling carriers to donate to the pool unused numbers or uncontaminated and lightly contaminated thousand number blocks that are not needed to maintain six-month inventory levels. The FCC has not adopted any specific directives as to how code or block holders shall determine their six-month inventory levels. Without specific directives, no objective basis exists upon which to verify whether a carrier’s inventory is, in fact, limited to its need for a six-month period. Instead, carriers can simply assert that the amount of blocks of telephone numbers in their inventory constitutes a six-month supply with no independent accountability to substantiate such a claim.

Historical experience, however, shows that carriers have repeatedly taken numbers from the pool for stocking their inventories in excess of their actual needs. As a result, surplus numbers stockpiled in inventory are not available to other carriers that may need numbers to serve their own customers. Such hoarding of numbers may create a perception that an area code is about to exhaust its supply of numbers when, in reality, available numbers are merely being allocated inefficiently. Accordingly, reliance on carriers’ projections does not necessarily offer the most reliable means of assuring that the inventory is limited to a six-month supply.

The Commission’s Telecommunications Division (TD) has completed a review of North American Numbering Plan Administration (NANPA)

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<sup>2</sup> *Id.*, at paragraph 103.

Numbering Resource Utilization/Forecast (NRUF) data of carriers' utilization of telephone numbering resources. In its June 7, 2004 report to the FCC on the effectiveness of the 25% contamination rate limited waiver granted in the 310 and 909 area codes, TD staff demonstrated through several scenarios using multiple area codes across California that inventory rules would help to extend the life of an area code. In view of the TD analysis of carrier data, we find that many carriers take far more telephone numbers from the number pool than needed to meet customer demand.

The manner in which telephone numbers are used or held in the 310 area code provides an example of numbering use patterns that is illustrative of other California area codes. For example, the six-month inventory needed to meet the growth in customer demand for all carriers in the 310 area code in 2003 was 363 one-thousand blocks yet carriers retained in their inventories nearly 5,500 one-thousand blocks over 25% contaminated (or used)<sup>3</sup> and more than 550 one-thousand blocks less than 25% contaminated (or used). These statistics make it clear that carriers have kept available telephone numbers far in excess of real needs. NANPA data demonstrate that carriers have retained blocks of telephone numbers eligible to be returned to the pool even though carriers have an abundance of phone numbers in their inventories beyond historical need.

In its June 7, 2004, Report to the FCC, the TD staff identified various factors that encourage carriers to keep excess inventories. First, the FCC has not adopted any standard definition or uniform formula to determine a carrier's six-month inventory needs. As a result, carriers can simply claim that the required

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<sup>3</sup> December 31, 2003 NRUF Report.

inventory is double, triple, or quadruple their actual growth during the preceding six months. Thus, the lack of a prescribed formula to determine the six-month inventory needs allows carriers to carry excess inventories.

The uncertainty associated with the timing of donations and returns also contributes toward excess inventories. Some carriers claim that donations and returns are only required at the time that an area code enters into number pooling even though carriers may have excess inventories after the fact. Therefore, they maintain excess inventories, thereby stranding large quantities of telephone numbers, and contributing to area code exhaust. On the other hand, other carriers may donate and return thousand-blocks even after an area code has entered number pooling, but do not do so regularly. Only a few carriers routinely donate and return thousand-blocks in all California area codes consistent with the spirit of the FCC's Numbering Resource Optimization Orders and the Commission's rules.

A third factor identified by the TD staff concerns the lack of a clearly defined forecast methodology for carriers to use to calculate their need for inventories. The TD staff found that carriers generally over-forecast their need for thousand-block inventories. If carriers acquired from the number pools the thousand-blocks based on forecasts of future numbering needs determined by considering their historical need for telephone numbers,<sup>4</sup> then thousand-blocks would be better allocated and utilized. Therefore, the lack of a clearly defined forecast methodology contributes to the premature exhaust of area codes.

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<sup>4</sup> For the purposes of its analysis, the Commission staff used the December 31, 2002 and December 31, 2003 NRUF Reports. However, for other types of analyses, different

*Footnote continued on next page*



In order to promote conservation and more efficient utilization of California's valuable numbering resources, therefore, we conclude that specific guidelines need to be formulated and adopted prescribing how a six-month inventory is to be determined. Accordingly, we adopt the rules set forth in this decision to be applied by carriers in determining short-term inventory levels for each applicable California rate center in which they hold numbering resources. As described in detail in Section IV below, the adopted methodology allows for growth in inventory based on the carrier's historic experience multiplied by a growth factor capped at 15%.

## **II. Procedural Background**

On July 16, 2004, Assigned Commissioner Loretta M. Lynch issued an Assigned Commissioner Ruling (ACR) providing parties an opportunity to comment on the development of carrier six-month inventory rules to be adopted by this Commission. Comments were filed on July 30, 2004 with reply comments on August 6, 2004. The South Bay Cities Council of Governments (SBCCOG), *et al.*<sup>5</sup> support development of inventory rules in order to promote the better and more efficient utilization of telephone numbers to avoid burdening communities with unnecessary area code splits. Other parties commenting on the ACR were telecommunications carriers (SBC California, Inc. (SBC) and Verizon California,

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periods of NRUF Reports can be used to determine the change in Assigned and Intermediate numbers.

<sup>5</sup> Also joining in the comments were Congresswoman Jane Harmon, from the 36<sup>th</sup> Congressional District and Los Angeles County Supervisor, Don Knabe.

Inc.) or industry groups (the Joint Wireless Carriers<sup>6</sup> and the California Cable & Telecommunications Association (CCTA)). Telecommunications carriers oppose establishment of any Commission-adopted inventory rules, arguing that the Commission lacks jurisdiction to adopt such rules because carrier inventory rules may only be addressed at the federal level.

A subsequent ACR issued on September 24, 2004, set forth proposed rules to be adopted by the Commission, which would set limits on permissible levels of individual carrier inventories. A workshop was held on October 4, 2004, where participants were offered the opportunity to provide input concerning the proposed rules in the ACR as well as to suggest alternatives or modifications. Carriers and other parties' technical experts were invited to attend this workshop to identify and address any applicable technical concerns at issue in establishing inventory rules. Participants were specifically invited to address issues such as: how inventory rules based on historical use will affect carrier supply needs; whether another basis should be used for setting inventory rules; which numbering categories should be used to define historical use; how many NRUF periods should be considered in defining rules, and whether – and, if so, how – growth rate should be incorporated into inventory rules. Parties were also to given the opportunity to address the role of marketing strategy in projecting six-month inventory rules. In addition, parties were provided the opportunity to file written comments on or before October 11, 2004, regarding the proposed rules. We have considered parties' objections to our inventory rules, but we remain

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<sup>6</sup> The "Joint Wireless Carriers" consist of AT&T Wireless Services, Inc.; Nextel of California, Inc.; Omnipoint Communications, Inc. dba T-Mobile; and Sprint Telephony PCS, L.P., and Sprint Spectrum, L.P., and Wireless Co, L.P., all dba Sprint.

persuaded that adoption of inventory rules is warranted. We address parties' objections below.

### **III. Responses to Parties' Objections to Inventory Rules**

#### **A. Jurisdiction to Adopt and Implement Inventory Rules**

Several parties assert that the Commission lacks authority to adopt guidelines for carriers' six-month inventories, or to direct the Pooling Administrator or NANPA to determine a carrier's six-month inventory needs. The parties argue that such authority lies exclusively with the FCC, and that the FCC authorized the NANPA to withhold telephone numbers from carriers not in compliance with the rules. The parties argue that the role of the states in this regard was merely to provide a forum for carriers to challenge the NANPA and to either affirm or overturn the NANPA's decision to withhold numbering resources.

The parties argue that the FCC's delegation of numbering authority to the Commission placed specific limits on the actions that the Commission may take, and did not delegate authority for the Commission to determine a carrier's short-term inventory needs. The parties argue that although the FCC provided conditional authority to implement various area code conservation and relief planning measures, the delegation of authority was to be superseded by the FCC's upcoming decisions in the Numbering Resource Optimization (NRO) proceeding that would establish national guidelines and procedures for number optimization.<sup>7</sup> The FCC released its NRO in March 2000 in which the FCC,

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<sup>7</sup> See Report and Order and Further Notice of Proposed Rulemaking (NRO Order) FCC 00-104 at paragraph 7.

among other measures, established the requirement that carriers may keep no more than a six-month inventory level of numbering resources.

In the NRO, the FCC determined that a carrier should be able “to retain a sufficient number of thousands-blocks to meet its six month inventory projection forecast.”<sup>8</sup> The parties thus argue that the FCC permitted carriers to determine a six-month inventory level based upon each carrier’s own forecast of demand, rather than being limited to historic use or other restrictions, as called for under the Commission rules.

Although the parties cite the FCC’s delegation of authority to California in FCC 99-248 to implement several number conservation measures,<sup>9</sup> they do not cite the very specific language in paragraph 14 in FCC 99-248, which authorized the Commission to amend industry guidelines after consulting with the industry.

Where the California Commission determines that changes, modifications, or departures from the guidelines are desirable, we direct the California Commission to consult with the industry prior to implementing such changes.

It is correct, as parties note, that the FCC intended its subsequent orders establishing national numbering and pooling rules to supersede the broad grant of authority to California. At the same time, however, the FCC never expressly revoked the specific grant of authority to California to change, modify, or depart from industry guidelines. Indeed, the FCC itself has never adopted any specific rules pertaining to how carrier six-month inventories are to be calculated. We

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<sup>8</sup> FCC 00-104 at paragraph 191.

<sup>9</sup> Joint Comments of SBC and Verizon, p. 2.

conclude, therefore, that California retains authority to modify the guidelines to include language regarding how carrier six-month inventory limits are to be determined in accordance with FCC 99-248. Certainly, any guidelines that we adopt cannot conflict with FCC numbering rules, but here the FCC has no specific prescription for the calculation of six-month inventory levels, and has never promulgated inventory calculation guidelines that would conflict with the rules we adopt today. Thus, the guidelines we adopt do not conflict with any FCC numbering order promulgated after California's grant of delegated authority.

Further, we have complied with the FCC's delegated authority by seeking comments from the industry as to what the guidelines should be. Despite the opportunities provided to parties to provide information in developing inventory rules through written comments and workshop participation, parties have provided little affirmative contribution. To a large extent, the responding parties have given short shrift to this process, and instead, have focused most of their remarks merely on assertions that the Commission does not possess authority to create six-month inventory guidelines.

Notwithstanding their objections, parties have been consulted and provided with the opportunity to offer input in order to ensure that the guidelines we adopt are reasonable and rational. Based on delegated federal authority that allows states to undertake conservation measures to best address states' needs, therefore, we shall move forward with the development of inventory rules.

Moreover, adoption of inventory rules is consistent with our delegated responsibilities to assess the need for and timing of area code relief. The FCC has recognized the essential role performed by state commissions in this regard, and

that “state commissions are uniquely positioned to determine when...to implement area code relief.”<sup>10</sup> The proper determination of when to implement area code relief, in turn, requires effective tools to assess to what extent numbering resources are being utilized efficiently. The FCC has recognized that maximizing the efficient use of numbers within area codes serves to “reduce the need to introduce new area codes, which protects consumers from the expense, trouble and dislocation that area code relief entails and also can help prevent premature exhaust of the existing [area code].”<sup>11</sup>

Thus, the FCC recognizes that the state commission level is best equipped to assess efficient number resource utilization as a basis for the timing of any necessary area code relief. The FCC has stated that it “must rely on state commissions to make area code relief decisions because of their unique position to ascertain and weigh the very local and granular information inherent in area code relief decision making.”<sup>12</sup> Consistent with the FCC’s reliance on state commissions to ascertain and weigh localized number utilization data, state commissions are responsible for verifying that numbering resources are, in fact, being utilized in the most efficient manner. The verification of number utilization efficiency applies not just to the acquisition of new telephone numbers, but equally to carriers’ retention of blocks of unused telephone numbers in their inventories.

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<sup>10</sup> See *Numbering Resource Optimization*, CC Docket No. 99-200, Second Report and Order, and Second Further Notice of Proposed Rulemaking (FCC 00-429), paragraph 57.

<sup>11</sup> FCC 00-429, paragraph 52.

<sup>12</sup> FCC 00-429, paragraph 59.

The FCC's requirement limiting supplier inventories to six-months worth of unused telephone numbers was adopted as a tool to avoid carriers' stockpiling of surplus numbers and to promote efficient use of numbers. The FCC has noted that stockpiling of surplus numbers not only contributes to the risk of premature exhaust of an area code, but also can be indicative of anticompetitive behavior creating barriers to market entry. The FCC has recognized that markets for numbering resources must "be structured to avoid inequities that might occur through...attempts by well-financed carriers to stockpile numbers to keep them away from their less well-financed competitors..."<sup>13</sup> Yet, in the absent objective rules prescribing a six-month inventory, we are constrained in being able to verify that carriers are not stockpiling numbers and that inventory is, in fact, limited to only a six-months supply. If carriers' inventory exceeds a six-month supply, as intended by the FCC rules, then numbers are not being allocated in the most efficient manner possible. Our adopted inventory rules provide an objective means of verifying that the six-month supply is not being exceeded.

Accordingly, our adoption of inventory rules is a necessary adjunct of our responsibility to assess the efficiency of number utilization as part of our area code planning role. Pub. Util. Code § 7943 expressly requires the Commission to implement all reasonable telephone number conservation measures before approving an area code split. In order to meet our delegated responsibilities to assess the need for and timing of any area code relief consistent with § 7943, therefore, it is necessary to implement reasonable conservation measures to

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<sup>13</sup> FCC 00-429, paragraph 163.

assure that carriers' inventory levels do not exceed a six-month supply. Accordingly, the inventory rules adopted herein, based upon how carriers actually utilize numbers, constitute reasonable telephone number conservation measures that are essential to support the efficient use of numbering resources in an area code, in conformance with Section 7943. In consideration of all of these factors, we conclude that it is within the delegated jurisdiction of the FCC for the Commission to adopt and implement the inventory rules set forth in the instant order.

#### **B. Effects of Rules on Customer's Choice of Service Provider**

The Joint Wireless Carriers (JWC) argue that the proposed inventory rules would place the Commission in a position of controlling the market and consumer choice, and that inventories could be so restricted that multiple carriers would seek the same number resources to meet the demand of one customer. The JWC argue that the Commission's determination of which service provider would be able to hold telephone numbers in such a situation could dictate the consumer's ultimate selection of a service provider to provide service.<sup>14</sup>

We disagree with the JWC's characterizations of the effects of the inventory rules and of the claimed control of the Commission in determining

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<sup>14</sup> The Joint Wireless Carriers claim that the Commission's staff recently found itself in just such a situation, but their claim is a mischaracterization. The situation referenced involved two carriers that requested whole NXX codes for the same customer. Neither of the carriers, however, upon investigation had actually obtained the customer, but only an interest in acquiring the customer. In short, the customer was left to decide which carrier to select before any code was assigned to a carrier.



consumers' choice of service provider. Even with the implementation of our inventory rules, carriers will still retain the flexibility to increase their inventory to accommodate demand growth up to 15%. Moreover, if a carrier receives a customer request for new numbers that it cannot meet with its current supplies, the current rules permit the carrier to make a "safety valve" request as prescribed under FCC rules. Carriers can also apply for telephone number blocks or codes to meet growth needs once they have met applicable utilization thresholds.

Rather than deprive carriers of necessary numbering resources, the inventory rules merely require carriers to use telephone numbers in a more efficient and optimal manner, and limit the ability for carriers to hoard numbers for extended periods of time. The result will be an increase the number of thousand-blocks available in the number pools throughout California and a decrease in the number of stranded telephone numbers within carriers' inventories.

### **C. Adequacy of Existing Conservation Measures**

Certain parties argue that mechanisms already in effect are sufficient to address any perceived abuse in number utilization such as utilization requirements, sequential numbering, reclamation procedures, random or for-cause audits, access to NRUF Reports, and months-to-exhaust (no more than 15% over historical usage in the previous 12 months).

We acknowledge that such number conservation measures have been put in place to promote more efficient utilization of telephone numbers. We do not believe, however, that the current numbering inventory system is working as efficiently as it could. Carriers still carry excess telephone number inventories beyond their needs. The FCC's current numbering rules do not ensure that carriers donate and return thousand-blocks to the number pools. Carriers rarely

donate thousand-blocks on their own accord. Even then, they do not donate as much as they could or should, consistent with meeting their service obligations, as demonstrated by our past experience.

Repeatedly, the Commission staff has had to directly instruct or request carriers to donate thousand-blocks to replenish the number pools to prevent prematurely exhausting area codes. For example, an Assigned Commissioner's Ruling was issued on August 21, 2003<sup>15</sup> directing carriers to donate 25% or less contaminated thousand-blocks to rate centers in the 310 and 909 NPAs.

Commission staff requested carriers to donate thousand-blocks in a couple of ways. Commission staff sent letters<sup>16</sup> to carriers encouraging them to periodically review their inventory holdings against their six-month inventory needs and donate those thousand-blocks in excess of their six-month inventory needs.

These two projects resulted in dramatic increases of available thousand-blocks in the 310, 909, 714, 760, and 818 NPAs's number pools. Moreover, Commission staff contacted specific carriers with excess inventories in rate centers in which the Pooling Administrator has received a request to replenish the same rate center since it had zero available thousand-blocks. Since July 11, 2003, Commission staff has managed 54 of these pool replenishment requests while approving only 8 NXX codes to be opened.<sup>17</sup>

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<sup>15</sup> Proceedings R.95-04-043 and I.95-04-044, Adopted August 21, 2003.

<sup>16</sup> Commission staff sent a letter to carriers with excess inventories in the 310 and 909 NPAs on May 23, 2003, in the 714 NPA on June 18, 2003, in the 760 NPA on July 9, 2003, and in the 818 NPA on July 28, 2003.

<sup>17</sup> Three of the 54 pool replenishment requests are currently pending.

The “Joint Wireless Carriers” are incorrect in claiming that the Months-To-Exhaust (MTE) worksheet only allows carriers to use a maximum of 15% growth rate when calculating the forecast section of the MTE worksheet. There is no maximum growth rate. Some carriers have used growth rates greater than 15% in their MTE worksheets without their applications being denied by the PA.

The MTE worksheet has flaws, which the FCC has recognized and expressed in FCC 00-104<sup>18</sup> and FCC 00-429.<sup>19</sup> The MTE worksheet does not prevent carriers from hoarding telephone numbers and carrying excess inventories of telephone numbers, but actually provides a vehicle for carriers not to use telephone numbers in an optimal and efficient manner. We agree with the FCC that the MTE worksheet is inadequate, highly subjective, and has no retrospective accountability. Our inventory rules are therefore warranted as a means of augmenting existing measures to assure that carriers utilize telephone numbers more efficiently.

#### **D. Effects of the Rules on New Carriers**

The carriers argue that Commission inventory rules will discriminate against and burden new and emerging market entrants. They argue that because new providers will have little or no data from which to derive actual historical use, they will be unable to substantiate six-month inventory projections and will therefore be denied telephone numbers.

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<sup>18</sup> *FCC 00-104*, CC Docket No. 99-200, Released March 31, 2000, paragraphs 90-91, and 104.

<sup>19</sup> *FCC 00-429*, CC Docket No. 99-200, Released December 29, 2000, paragraph 29.

The inventory rules that we adopt in this decision do not affect how carriers will be able to acquire telephone numbers. Moreover, if a service provider has never submitted a Numbering Resource Utilization Forecast (NRUF) Report, it is not subject to the inventory rules described in this decision. Therefore, the carriers' objection that new providers will be denied telephone numbers is moot; our inventory rules do not discriminate against or burden new market entrants.

New carriers will still be able to obtain thousand-blocks used for "footprint" purposes on the same basis as they already do. Moreover, the adopted 15% growth rate cap will not burden a new service provider trying to get a foothold in a market because that new service provider can acquire telephone numbers from the number pool once it has achieved a 75% utilization rate for telephone number blocks held in the rate center in which it needs numbering resources.

#### **E. Carrier's Flexibility to Manage their Numbering Requirements**

The JWC argue that our adoption of inventory rules will constrain carriers' flexibility to meet customer demand based on their own business judgment. We do not intend nor desire to micromanage by establishing inventory rules in this decision, even assuming there were enough Commission resources for such an endeavor. To the contrary, the inventory rules should help to make donations of thousand-blocks more automatic, frequent, and independent of Commission intervention. These rules will actually make it easier for carriers to reach the 75% utilization threshold by decreasing the denominator of the utilization formula, which will allow carriers to apply for growth-related numbering resources faster.

Our adopted rules merely guard against carriers' hoarding of surplus blocks of numbers. Carriers with a legitimate need for additional telephone numbers will still retain the flexibility to utilize existing procedures for requesting and obtaining such resources. Our inventory rules do not change the way that carriers submit applications for numbering resources to the PA as they have in the past. Accordingly, our inventory rules will not constrain carriers' ability to acquire thousand-blocks from the number pools or NANPA to which they are otherwise entitled.

To the extent that carriers experience heightened demand during certain seasonal periods, they will still be able to seek those additional blocks of numbers from the PA if they can document the increased demand under current FCC rules. Moreover, our inventory rules will not constrain carriers' ability to obtain numbers through the safety valve process established by the FCC. In addition, we have modified the calculation of permissible inventory increases as initially proposed in the ACR to address parties' concerns that the calculation does not take into account the effects of seasonal demand fluctuations. In the formula adopted in this order, we permit carriers to calculate permissible inventory increases based upon a 12-months period of historic change instead of only a six-month period of historic change as originally proposed. By permitting carriers to increase their inventory based upon a full 12 months of historic growth, the effects of seasonal variations are captured in the inventory formula.

Moreover, our adopted rules do not limit carriers' inventory to historical levels, but permit carriers' discretion to forecast their inventory requirements for customer demand beyond historic growth up to 15%. The 15% growth cap provides reasonable discipline against overly inflated forecasting of inventory needs. A 15% growth rate cap was applied by the FCC in its directives

for evaluating Safety Valve requests under *FCC 01-362*,<sup>20</sup> for determining the number of thousand-blocks that a carrier would need in the future. The provision for a 15% growth rate cap reasonably addresses carriers' need to accommodate growth in their inventory needs. Moreover, six carriers (three local exchange carriers and three wireless carriers) indicated in responses to a Commission Staff May 7, 2004 Data Request regarding how carriers calculated their six-month inventory that they used growth rates of 15% or less, which they then applied to the average of their historical assignments. Also, in New York, the telecommunications industry agreed that forecasted demand must be within 15% of the average historical monthly utilization for the past six months when carriers apply for growth numbering resources. Thus, it is consistent to apply a similar 15% cap here.

#### **F. Need to Keep Two Sets of Records**

Parties argue that imposing Commission inventory rules will require carriers to maintain two sets of records to account for the different inventory methodologies or adopt the proposed rules, which would be costly, burdensome, unnecessary, and inconsistent.

Carriers would have either one or two methods to calculate short-term inventory levels depending on whether or not the service provider decides to only use the method that this decision describes and the purpose for which the method would be used. Carriers have records of their NRUF Reports. The method for determining short-term inventory levels as described in this decision is simple and involves just a few mathematical operations. A carrier can easily input the data from the NRUF Reports into a database like Microsoft Excel,

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<sup>20</sup> *FCC 01-362*, CC Docket No. 99-200, Released December 28, 2001.

create a few formulas to perform the mathematical operations described in this decision, and then copy the formulas for the whole data set. Moreover, this decision only requires carriers to review their inventory of telephone numbers and compute their short-term inventory levels bi-annually. Based on the responses of 28 carriers to the Commission's May 7, 2004 Data Request on how carriers determine their six-month inventory level, only carriers indicated that they reviewed their inventory bi-annually while 21 carriers specified reviewing it weekly, monthly, or quarterly.

Carriers did not provide any cost estimates to substantiate claims that the short-term inventory rules in this decision would be costly for carriers to adopt.

#### **IV. Adoption of Inventory Rules**

We conclude that adoption of the rules set forth below for determining carriers' six-month inventories is warranted in order to promote the more efficient utilization of telephone numbers. Efficient utilization of numbers, in turn, will help extend the life of area codes and avoid the risk of prematurely opening a new area code to relieve code exhaust.

We accordingly direct carriers to apply the following rules in determining their six-month inventory levels for each applicable rate center and area code in California within which a carrier holds numbering resources.

##### **A. Rules for Carriers that Have Filed at Least Three NRUF Reports**

Code or block holders that have acquired and retained public numbering resources and have filed at least three Numbering Resource Utilization/Forecast (NRUF) Reports with the North American Numbering Plan Administrator (NANPA) shall apply the following guidelines in determining the level of numbering resources that they may retain as a six-month inventory. A

separate calculation shall be made for each rate center within each area code within which the carrier holds an inventory of telephone numbers:

- Calculate the change in the historical demand for telephone numbers, which represents the code or block holder's actual growth. Code or block holders shall use the most recently filed NRUF Report (NRUF at time 2) and the NRUF Report filed 12 months before the most recently filed NRUF Report (NRUF at time 1). The change in the historical demand for telephone numbers consists of those telephone numbers categorized as Assigned or Intermediate in the NRUF Reports. The formula for calculating the change in the historical demand for telephone numbers shall be  $((\text{Assigned numbers} + \text{Intermediate numbers as of NRUF at time 2}) - (\text{Assigned numbers} + \text{Intermediate numbers as of NRUF at time 1})) / 2$ .
- Determine the appropriate growth rate, whereby the maximum growth rate is 15%, to use to calculate the projected growth in telephone numbers for the next six months.
- Compute the projected growth in telephone numbers. The formula shall be the product of the change in the historical demand for telephone numbers and the appropriate growth rate.
- Find out the excess inventory of telephone numbers. The formula shall be the difference of the Available numbers reported in NRUF at time 2 and the projected growth in telephone numbers.
- Figure out the short-term inventory level. The formula shall be the difference between the total numbering resources and the excess inventory of telephone numbers.

In order to clarify how the above rules would apply in determining excess inventory, the following example is provided using a hypothetical "Carrier X." Assume that based on the most recently filed NRUF report ( NRUF



at time 2), Carrier X has 10,000 total numbering resources from 10 thousand-blocks in Rate Center A, which includes 7,000 Assigned numbers, 500 Intermediate numbers, and 2,500 Available numbers. Also, assume that the NRUF report filed 12 months earlier (NRUF at time 1) indicates that Carrier X had 8,000 total numbering resources from 8 thousand-blocks in Rate Center A, which included 6,000 Assigned numbers, 500 Intermediate numbers, and 1,500 Available numbers. The change in the historical demand for telephone numbers would be  $((7,000 + 500) - (6,000 + 500))/2 = 500$  numbers. Assume that Carrier X has determined that the appropriate growth rate is 15%.

By applying the above-referenced inventory guidelines under these assumptions, the resulting projected growth in telephone numbers would be  $(500) * (1.15) = 575$ . The excess inventory of telephone numbers to be donated to the pool would be  $(2,500 - 575) = 1,925$ . The short-term inventory level would be  $(10,000 - 1,925) = 8,075$  numbers.

**B. Rules for Carriers that Have Filed One or Two NRUF Reports**

For code or block holders which have acquired and retained public numbering resources and have filed no more than one or two NRUF Reports with NANPA, we apply a modified version of the rules set forth in the preceding section. This modified version of the rules recognizes that code or block holders with two or fewer NRUF Reports will not have sufficient historical data to compute 12-months of utilization data changes. Accordingly, carriers in this category shall utilize data from their most recently filed NRUF report as the basis for prospective inventory calculations in accordance with the following procedures:

- Calculate the change in the historical demand for telephone numbers, which represents the code or block

holder's actual growth. Code or block holders shall use the most recently filed NRUF Report (NRUF at time 2). The change in the historical demand for telephone numbers consists of those telephone numbers categorized as Assigned or Intermediate in the NRUF Reports. The formula for calculating the change in the historical demand for telephone numbers shall be (Assigned numbers + Intermediate numbers as of NRUF at time 2).

- Determine the appropriate growth rate, whereby the maximum growth rate is 15%, to use to calculate the projected growth in telephone numbers for the next six months.
- Compute the projected growth in telephone numbers. The formula shall be the product of the change in the historical demand for telephone numbers and the appropriate growth rate.
- Derive the excess inventory of telephone numbers. The derivation shall be the difference of the Available numbers reported in NRUF at time 2 and the projected growth in telephone numbers.
- Figure out the short-term inventory level. The formula shall be the difference of the total numbering resources and the excess inventory of telephone numbers.

In order to clarify how the above rules would apply in determining excess inventory for code or block holders which have acquired and retained public numbering resources and have filed no more than one or two NRUF Reports, the following example is provided using a hypothetical "Carrier Y." Assume that based on the most recently filed NRUF report ( NRUF at time 2) indicates that Carrier Y has 10,000 total numbering resources from 10 thousand-blocks in Rate Center A, which includes 7,000 Assigned numbers, 500 Intermediate numbers, and 2,500 Available numbers. The change in the historical demand for telephone numbers would be  $(7,000 + 500) = 7,500$ .

Carrier Y has determined that the appropriate growth rate is 15%. The projected growth in telephone numbers would be  $(7,500) * (1.15) = 8,625$ . The excess inventory of telephone numbers would be  $(2,500 - 8,625) = -6,125$ . The short-term inventory level would be  $(10,000 - (-6,125)) = 16,125$  numbers.

#### **V. Time Table for Implementation of Inventory Rules**

We shall require carriers to begin implementing the inventory rules adopted herein effective with the filing of the next scheduled bi-annual NRUF report that is due on February 1, 2005. Carriers shall be required to calculate their six-month inventory level utilizing data in the NRUF Report due on February 1, 2005 and donate any excess inventory blocks to the PA based on application of our adopted rules. Any surplus blocks identified through the six-month inventory calculations shall be donated to the pool no later than 10 working days after their filing of the February 1, 2005 NRUF.

Every six months thereafter, carriers will be required to perform an updated calculation of permissible inventory levels, and to make any resulting donations to the pool of excess inventory blocks as defined by the adopted rules.

#### **VI. Comments on Draft Decision**

The draft decision of the ALJ Thomas Pulsifer in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(g)(1) and Rule 77.7 of the Rules and Practice and Procedure. Comments were filed on \_\_\_\_\_, and reply comments were filed on \_\_\_\_\_.

#### **VII. Assignment of Proceeding**

Loretta M. Lynch is the Assigned Commissioner and Thomas R. Pulsifer is the assigned Administrative Law Judge in this proceeding.

#### **Findings of Fact**

1. Although the FCC has established requirements limiting carriers to a six-month supply of inventory for numbering resources, the FCC has not

established any clear and objective method to assure that carriers' actual inventory is, in fact, limited to six-month needs.

2. The establishment of objective guidelines for determining six-month inventory supplies will decrease the volume of stranded telephone numbers, increase available telephone numbers for those carriers truly in need of them, and prevent extra NXX codes from being prematurely opened.

3. Based on actual number utilization experienced by carriers, it is appropriate to establish rules defining six-month inventory needs, forecast methodology, and timing of donations and returns.

4. Historical experience shows that carriers have repeatedly taken numbers from the pool for stocking their inventories in excess of their actual needs.

5. Carriers' stockpiles of surplus numbers are not available to other carriers that may need numbers to serve their own customers.

6. Carriers' hoarding of numbers may create a perception that an area code is about to exhaust its supply of numbers when, in reality, available numbers are merely being allocated inefficiently.

7. With the implementation of the adopted inventory rules in this decision, carriers will still retain the flexibility to increase their inventory to accommodate demand growth of up to 15%.

8. New carriers will not be adversely impacted by the adopted inventory rules, but can obtain thousand-blocks used for "footprint" purposes on the same basis as they already do.

9. Under the Commission's adopted inventory rules, carriers with a legitimate need for additional telephone numbers will still retain flexibility to utilize existing procedures for obtaining such resources as they have in the past.

10. A 15% growth cap provides reasonable discipline in limiting a supplier's inventory of telephone numbers while preserving flexibility to accommodate customer demand.

11. A 15% growth rate cap was applied by the FCC in its directives for evaluating Safety Valve requests.

12. The methodology for determining short-term inventory levels adopted in this decision is straightforward and involves just a few mathematical operations that can be readily input into a database from NRUF data.

### **Conclusions of Law**

1. The inventory rules set forth in Appendix 1 of this order should be adopted to promote more efficient utilization of numbering resources in accordance with Pub. Util. Code § 7943.

2. Carriers that are subject to the rules, as defined in Appendix 1, should be required to implement the adopted inventory rules in accordance with the schedule set forth in the order below.

3. The FCC provided delegated authority to the California Public Utilities Commission to implement various area code conservation and relief planning measures, including authority to change, modify, or depart from industry guidelines. The inventory rules adopted in this order are within the Commission's delegated authority.

4. The FCC's delegation of authority to California was never expressly revoked by any of the FCC's subsequent orders in the Numbering Resource Optimization proceeding regarding national guidelines and procedures for number optimization.

5. The Commission has complied with the FCC's delegated authority by first seeking input from the industry as to what the guidelines should be for a six-month inventory before adopting rules.

6. Because the FCC itself has never adopted any specific rules pertaining to how carrier six-month inventories are to be calculated, the Commission's rules do not conflict with the FCC.

## **O R D E R**

### **IT IS ORDERED** that:

1. The rules governing the determination of six-month inventory levels as set forth in Appendix 1 are hereby adopted.

2. The Appendix Rules set forth in Part 1 shall apply to code or block holders that have acquired and retained public numbering resources within one or more rate centers in California and that have filed at least three Numbering Resource Utilization Forecast (NRUF) Reports.

3. The Appendix Rules set forth in Part 2 shall apply to code or block holders that have acquired and retained public numbering resources within one or more rate centers in California and that have filed only one or two NRUF Reports.

4. The inventory rules shall not apply to new code or block holders that have not yet filed any NRUF Reports.

5. Qualifying carriers shall begin implementing the inventory rules adopted in this order effective with the filing of the next scheduled bi-annual NRUF report that is due on February 1, 2005.

6. Carriers shall calculate their six-month inventory level utilizing the February 1, 2005 NRUF data and donate any excess inventory blocks to the Pooling Administrator based on application of our adopted rules.

7. Any surplus blocks identified through the six-month inventory calculations shall be donated to the pool no later than 10 working days after their filing of the February 1, 2005 NRUF.

8. Every six months thereafter, carriers shall perform an updated calculation of permissible inventory levels as prescribed by the rules in Appendix 1, utilizing updated NRUF data, and make any resulting donations to the pool of excess inventory blocks as defined by the adopted rules herein.

9. Carriers shall be required to maintain records for a period of three years documenting their calculations on a rate-center basis to determine the applicable six-month inventory limits that are permitted pursuant to this order, and such records shall be promptly made available to the Commission Staff for review upon request.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.

## **Appendix 1**

### **Adopted Inventory Rules for Determining Six-Month Levels**

#### **Part I- Rules Applicable to Code or block holders that have filed at least three NRUF Reports**

Code or block holders that have acquired and retained public numbering resources and have filed at least three Numbering Resource Utilization/Forecast (NRUF) Reports with the North American Numbering Plan Administrator (NANPA) must follow the following guidelines in determining the level of numbering resources that they are permitted to retain as a six-month inventory. A separate calculation shall be made for each rate center within each area code within which the carrier holds an inventory of numbering resources:

- Calculate the change in the historical demand for telephone numbers, which represents the code or block holder's actual growth. Code or block holders shall use the most recently filed NRUF Report (NRUF at time 2) and the NRUF Report filed 12 months before the most recently filed NRUF Report (NRUF at time 1). The change in the historical demand for telephone numbers comprises of those telephone numbers categorized as Assigned or Intermediate in the NRUF Reports. The formula for calculating the change in the historical demand for telephone numbers shall be  $((\text{Assigned numbers} + \text{Intermediate numbers as of NRUF at time 2}) - (\text{Assigned numbers} + \text{Intermediate numbers as of NRUF at time 1}))/2$ .
- Determine the appropriate growth rate whereby the maximum growth rate is 15% to use to calculate the projected growth in telephone numbers for the next six months.
- Compute the projected growth in telephone numbers. The formula shall be the product of the change in the historical demand for telephone numbers and the appropriate growth rate.



- Find out the excess inventory of telephone numbers. The formula shall be the difference of the Available numbers reported in NRUF at time 2 and the projected growth in telephone numbers.
- Figure out the short-term inventory level. The formula shall be the difference of the total numbering resources and the excess inventory of telephone numbers.

## **Part II- Rules Applicable to Code or block holders that have filed Only One or Two NRUF Reports**

Code or block holders, which have acquired and retained public numbering resources and have filed one or two NRUF Reports with NANPA must abide by the following guidelines. A separate calculation shall be made for each rate center within each area code within which the carrier holds an inventory of numbering resources:

- Calculate the change in the historical demand for telephone numbers, which represents the code or block holder's actual growth. Code or block holders shall use the most recently filed NRUF Report (NRUF at time 2). The change in the historical demand for telephone numbers comprises of those telephone numbers categorized as Assigned or Intermediate in the NRUF Reports. The formula for calculating the change in the historical demand for telephone numbers shall be (Assigned numbers + Intermediate numbers as of NRUF at time 2).
- Determine the appropriate growth rate whereby the maximum growth rate is 15% to use to calculate the projected growth in telephone numbers for the next six months.
- Compute the projected growth in telephone numbers. The formula shall be the product of the change in the historical demand for telephone numbers and the appropriate growth rate.

- Find out the excess inventory of telephone numbers. The formula shall be the difference of the Available numbers reported in NRUF at time 2 and the projected growth in telephone numbers.
- Figure out the short-term inventory level. The formula shall be the difference of the total numbering resources and the excess inventory of telephone numbers.

**(END OF APPENDIX 1)**